

AMENDMENT

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) A manufacturing method of a semiconductor device, comprising the steps of:

depositing on a substrate, on a surface of which a wiring is formed, a dielectric film made of fluorine-added carbon;

forming on the dielectric film an adhesion layer including silicon and carbon;

forming on the ~~dielectric film~~ adhesion layer a protective layer comprising a nitrogen-added silicon carbide film; ~~and~~

depositing on the protective layer a thin film ~~serving as a hardmask~~ made of oxygen-added silicon carbide by a plasma containing active species of silicon, carbon, and oxygen; and

obtaining a hardmask having a predetermined pattern by etching the thin film.

2. (Previously presented) The manufacturing method according to claim 1, wherein

the plasma containing active species of silicon, carbon, and oxygen is obtained by activating a gas of an organic silicon compound and an oxygen gas.

3. (Currently amended) The manufacturing method according to claim 1, wherein

the step of forming the ~~protective~~ adhesion layer includes the ~~sub-steps of:~~ step of

depositing on the dielectric film a silicon carbide film by a ~~second~~ plasma containing active species of silicon and carbon; ~~and~~

~~depositing on the silicon carbide film the nitrogen-added silicon carbide film by a third plasma containing active species of silicon, carbon, and nitrogen.~~

4. (Currently amended) The manufacturing method according to claim 1, wherein
the step of forming the ~~protective~~ adhesion layer includes the ~~sub-steps of:~~ step of
depositing on the dielectric film a silicon carbide film by a ~~second~~ plasma obtained by
activating a gas of an organic silicon compound; ~~and~~
~~depositing on the silicon carbide film the nitrogen-added silicon carbide film by a third~~
~~plasma containing active species of an organic silicon compound and active species of nitrogen.~~

5-12. (Canceled)

13. (New) The manufacturing method according to claim 1, wherein
the step of forming the protective layer includes the step of
depositing on the adhesion layer the nitrogen-added silicon carbide film by a plasma
containing active species of silicon, carbon, and nitrogen.

14. (New) The manufacturing method according to claim 2, wherein
the step of forming the protective layer includes the step of
depositing on the adhesion layer the nitrogen-added silicon carbide film by a plasma
containing active species of an organic silicon compound and an active species of nitrogen.

15. (New) The manufacturing method according to claim 1, further comprising of the step of
etching the dielectric film by a plasma through the hardmask.

16. (New) The manufacturing method according to claim 1, wherein
the step of depositing the thin film serving as a hardmask includes the sub-steps of:
depositing a thin film made of a silicon carbide by a plasma containing active species of
silicon and carbon, and
depositing a thin film made of an oxygen-added silicon carbide by a plasma containing
active species of silicon, carbon, and oxygen.